

Spent Nuclear Fuel Project

N. C. Boyter, Vice President/(509) 373-3725

K East Basins - Fuel Transfer System Operations



Canister Storage Building – Multi-Canister Overpack Welding

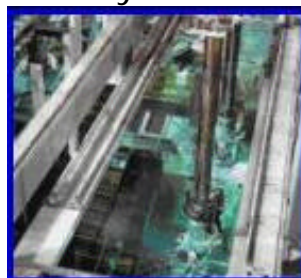


Sludge Transportation System – Test loading large diameter container into casks at K Basins



K West Basins

Fuel Retrieval System



Canister Cleaner Operations



Loading Cask on Trailer at K West

Cold Vacuum Drying Facility – Multi-Canister Overpack Processing



OVERVIEW

The Spent Nuclear Fuel (SNF) Project consists of Project Baseline Summary (PBS) RL-RS03, *Spent Nuclear Fuel*.

NOTE: Unless otherwise noted, all information contained herein is as of the end of July 2003.

NOTABLE ACCOMPLISHMENTS

Fuel Movement Activities: The project completed shipment of ten multi-canister over packs (MCOs) containing 60.36 metric tons of heavy metal (MTHM) from the K West Basin to the Cold Vacuum Drying Facility during July. As of August 11, 2003, a cumulative total of 255 MCOs containing 1,365.58 MTHM have been shipped.

Fuel Transfer System (FTS): The project completed 19 FTS shipments (190 canisters) during July, for a cumulative total of 155 shipments. As of August 11, 2003, a cumulative total of 156 FTS shipments (1,560 canisters) have been completed.

MCO Welding at Canister Storage Building: The project welded and "N" stamped ten MCOs during July for a cumulative total of 59 MCOs welded. As of August 11, 2003, the project has welded a cumulative total of 62 MCOs and is five MCOs ahead of the schedule.

Sludge Water System (SWS) - K East: A series of evaluations and independent reviews were conducted. A new technical strategy is being implemented that will simplify Authorization Basis (AB), procedures and operations; and reduce the Large Diameter Container (LDC) turnaround time from 14 to 9 days (supports meeting the August 31, 2004, milestone completion date).

SWS – K West: An organizational alignment meeting was conducted to integrate activities with other SNF Project and Waste Management organizations. The K West Risk Management Workshop was conducted on August 6, 2003, utilizing the Fluor Corporate Business Risk Management Framework. The workshop identified potential risks which could impact schedule during the procurement phase.

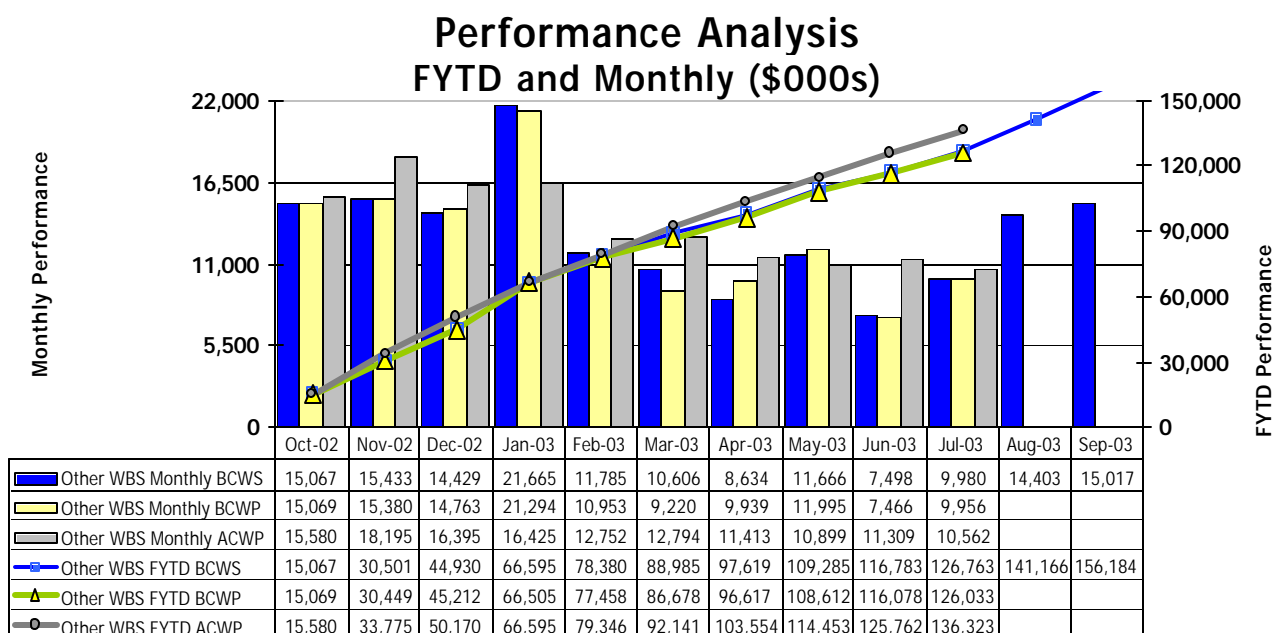
The project is evaluating the vendor bid packages received on August 11, 2003, in response to the Request for Proposal issued in June for K West Sludge Retrieval and Storage System.

FY 2003 SCHEDULE/COST PERFORMANCE (\$000)

Schedule Variance Analysis (-\$730K): The unfavorable one percent schedule variance is due to schedule delays in the FTS from K East to K West, delayed start of K East sludge removal, and subcontractor delays in the delivery of MCOs. A FTS recovery plan is being developed. K East sludge will continue behind schedule, with the Operational Readiness Review now scheduled to commence in October 2003. The MCO fabrication schedule will be recovered by September.

Cost Variance Analysis (-\$10,290K): The unfavorable eight percent cost variance is due to cost increases associated with design and operational readiness preparation for K East sludge removal, cost increases associated with FTS startup and initial operations, travel cost increases required to assist the MCO contractor with management of third-tier subcontractors, cost increases to support startup/certification of the welding subcontractor, and delays associated with staffing reductions due to sludge Operational Readiness Review (ORR) delays. The unfavorable cost variance is partially offset by efficiencies realized by combining operations of K East and K West Basins. The cost overruns associated with sludge are expected to continue through the balance of the fiscal year.

		Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
RL-RS03	Spent Nuclear Fuel	126,763	126,033	136,323	-730	-1%	-10,290	-8%	156,184



Milestone Achievement

Number	Milestone Title	Type (TPA/ DNFSB/PI)	Due Date	Actual Date	Forecast Date	Status/ Comments
M-34-29 (S15-02-001)	Complete K East Basin and K West Basin facility modifications for Alternate Fuel Transfer System casks transportation system	Tri-Party Agreement (TPA)	3/31/02	9/12/02		Complete
M-34-12-T01 (S15-02-001)	Complete construction of SWS (Construction Completion Document Section IIA.)	TPA	09/30/02	3/4/03		Complete
M-34-17 (S00-02-901)	Initiate K East to K West fuel transfer	TPA/Performance Incentive (PI)	11/30/02	11/25/02		Complete
M-34-18A (S03-03-068)	Complete removal of 957 MTHM of SNF from the K West Basin	TPA/DNFSB/PI	12/31/02	1/7/03		Complete
M-34-08 (S04-02-205)	Initiate full scale K East basin sludge removal	TPA/DNFSB/PI	12/31/02		11/2003	Behind schedule. Start ORR the week of 10/10/03
M-34-27-T01 (S03-03-069)	Complete removal of 1,252 MTHM of SNF from K West Basin	TPA	5/31/03	5/28/03		Completed 5/28/03; 3 days ahead of schedule
M-34-28* (S03-03-070)	Complete removal of 1,619 MTHM from the K West Basin	TPA	12/31/03		12/31/03	Projected to complete ahead of schedule.
M-34-25-T01 (S03-04-001)	Complete transfer of K East Basin SNF to K West Basin	TPA/PI	5/31/04		5/31/04	Accelerated schedule projected completion 12/2003.
M-34-18B (S00-00-902)	Complete removal of all K Basin SNF	TPA/DNFSB/PI	7/31/04		7/31/04	Accelerated schedule projected completion by 3/2004.

MILESTONE ACHIEVEMENT (CONTINUED)

Number	Milestone Title	Type (TPA/ DNFSB/PI)	Due Date	Actual Date	Forecast Date	Status/ Comments
S04-00-205, CD4	Complete ORR sludge transfer from K Basins	PI			11/2003	Behind schedule. Start ORR the week of 10/10/03
M-34-10* (S04-01-215)	Complete sludge removal from K Basins	TPA/DNFSB/ PI	8/31/04		8/31/04	K East Basin sludge removal planned for completion by 8/31/04. FH submitted a recommended change request for K West SWS to be completed by 6/30/05.
M-34-23* (S10-99-953)	Start K East water removal	TPA	9/30/04		9/30/04	On schedule
S07-04-005	Consolidate spent fuel in the 200 Area	PI	9/30/04		9/30/04	On schedule
M-34-09-T01* (S04-05-516)	Complete K Basins rack and canister removal	TPA	1/31/05		1/31/05	Potential changes to milestones due to alternate deactivation strategy submitted on 6/30/2003
M-34-24 (S10-99-954)	Complete K East Basin Water removal	TPA	9/30/05		9/30/05	* (see note below)
M-34-22 (S10-99-952)	Complete K West Basin water removal	TPA	8/31/06		8/31/06	* (see note below)
M-34-21-T01 (S10-99-951)	Initiate full-scale K West Basin water removal	TPA	10/31/05		10/31/05	* (see note below)
S06-06-005	Transfer of K Basins to the River Corridor Contractor	PI	10/30/05		10/30/05	On schedule
M-34-00A (S10-99-955)	Complete removal of K Basin fuel/sludge/debris/water from K Basins	TPA (Major)	7/31/07		7/31/07	* (see note below)

***NOTE: Milestone may be completed early, if proposed deactivation plan changes are approved.**

FY 2003 FH FUNDS VS. FORECAST (\$000)

	Expected Funds	Spend Forecast	Variance
RL-RS03 Spent Nuclear Fuel Project Completion - Operating	\$ 164,422	\$ 165,700	\$ (1,278)

NOTE: The variance between funds and the spend forecast is fully attributable to the redesign of the vented shipping cask for sludge.

ISSUES

SNF sub-project SWS – K East: The TPA milestone (M-34-08) to begin K East sludge movement by December 31, 2002, is behind schedule. The SNF sub-project is focusing on the implementation of the forced ventilation alternative to address the hydrogen generation issue. Design modifications are in progress, which include field changes to cask, Large Diameter Container (LDC), and trailer modifications. Changes to T-Plant and K Basin Authorization Bases are being developed and are scheduled to be complete in late August. Testing, procedure finalization, operator training, and final dry run are scheduled to be complete in September to support the Contractor ORR in early October, with the loading of the first LDC in November. The design changes significantly reduce the time required to fill and ship a LDC.

Fuel Production – FTS Shipments: Removal of all K Basin fuel by July 31, 2004, is based upon the completion of FTS shipments by January 31, 2004. As of August 11, 2003, the project completed 156 FTS shipments (1,560 canisters), and is 34 shipments (340 canisters) behind schedule. The less-than-expected performance was due to maintenance performed on right-angle drives in both basins, and a high jackscrew noise in the K East basin. Recovery actions taken include: (1) improvements to FTS annex and basin cooling systems at K East and K West; (2) leveling of K West and K East tables; (3) installation of noise monitoring connections and replacement of three of the FTS jackscrew drivers in K East; and (4) a temporary realignment of canister cleaning crew resources for 60 days to support FTS transfers. Training to qualify Nuclear Chemical Operators (NCOs) for FTS continues. A recovery plan will be implemented to show when additional NCOs are FTS qualified and to provide a timeframe to recover missed FTS shipments.